

Ship 16/07

Dart Aerospace Ltd.

Date: Thursday, 7/12/2007 10:39:33 AM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : DOOR DOUBLER
Job Number : 33524	
Estimate Number : 12942	
P.O. Number : N/A	Part Number : D3594044
This Issue : 7/12/2007 S.O. No. : N/A	Drawing Number : D3594 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : SMALL /MED FAB	Drawing Revision : A
Previous Run : N/A	Material : N/A
Written By : <u>JA</u>	Due Date : 7/17/2007 Qty: 4 Um: Each
Checked & Approved By : <u>JA 07.07.02</u>	
Comment : Est Rev : A New Issue 07-01-22 EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6S080	6061-T6 .080 Sheet
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Comment: Qty.: 0.5355 sf(s)/Unit Total : 2.1420 sf(s)

6061-T6 .080 Sheet

Batch: M104921

IB 07-07-13

2.0	WATER JET	FLOW WATER JET
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Comment: FLOW WATER JET

1-Cut as per Dwg D3594

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

IB 07-07-13 SAD 07/07/16 (4)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

IB 07-07-13

4.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

IB 07/07/16 (4)

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1

C'SINK AS PER DWG D3594

SAD 07/07/16 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3594-044 PAR #: N/A Fault Category: Prod - Im/med NCR: Yes No DQA: JA Date: 07.07.18
 QA: N/C Closed: JA Date: 07.07.23

NCR:33524		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/07/16	5.0	2 parts c'sink was Done slightly and over/loaded the hole RC Human Error	QS1042 07/07/16	- fill hole with weld Per QS1004	07-07-16	En 07/07/16	QS1042	En 07/07/16
				- grind flush transfer drill - re - c'sink * See attached e-mail.	MF 07-07-16			

NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOOR DOUBLER

Job Number: 33524

Part Number: D3594044

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Er 5/7/16 (x4)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

mf 07-07-16

(4)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

mf

07-07-17

9.0

MS210695

Anchor nuts



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Anchor nuts

BATCH: m104214

10.0

MS20426AD44

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Rivet

BATCH: m1001

mf 07-07-17 (4)

11.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Install Nut Plates As per Dwg D3594

mf

07-07-17 (4)

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Er 7/7/17 (x4)

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

7/7/17 SP

(4x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 7/12/2007 10:39:33 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOOR DOUBLER

Job Number: 33524

Part Number: D3594044

Job Number:



Seq. #:

Machine Or Operation:

Description :

14.0

QC21

FINAL INSPECTION/W/O RELEASE



07.07.17

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



U 07-07-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

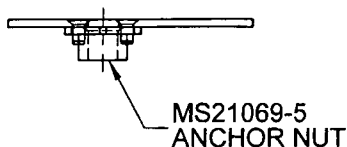
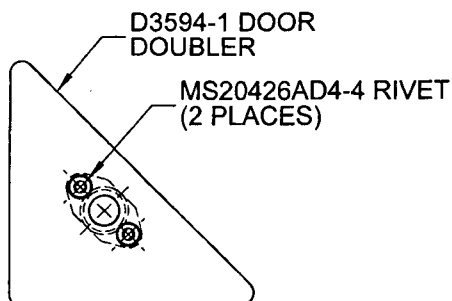
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

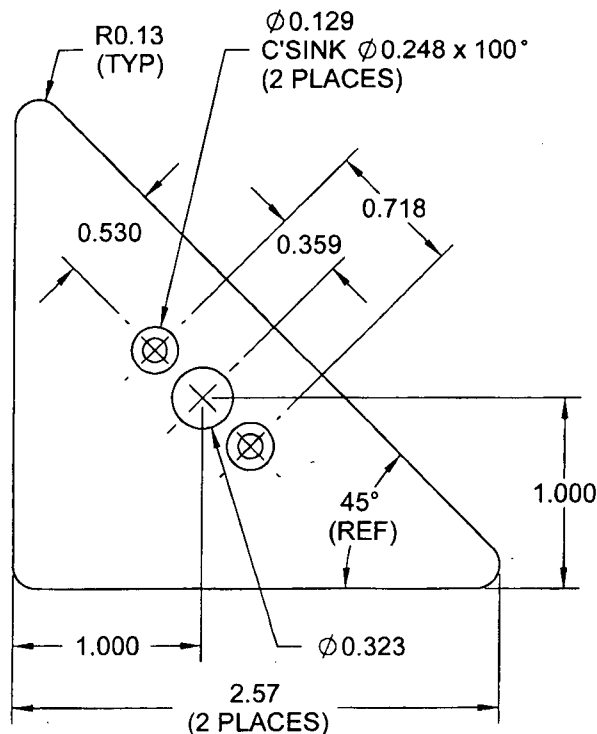
NOTE: Date & initial all entries

DART**RELEASED**
07.07.11
Per [signature]

DESIGN 13	DRAWN BY 13	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 13	APPROVED 13	DRAWING NO. D3594	REV. A SHEET 1 OF 3
DATE 07.04.13	TITLE DOUBLER		SCALE 1:1
REV A	DATE 07.04.13	DESCRIPTION NEW ISSUE	

**D3594-041 DOOR DOUBLER ASSEMBLY**
SCALE 1 : 2

QTY -041	P/N	DESCRIPTION
X	D3594-041	DOOR DOUBLER ASSEMBLY
1	D3594-1	DOOR DOUBLER
1	MS21069-5	ANCHOR NUT
2	MS20426AD4-4	RIVET

**D3594-1 DOOR DOUBLER** **NOTES:**

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK, PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF. DART SPEC. M6061T6S.080)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3594-041" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX

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WORK ORDER

NO. _____

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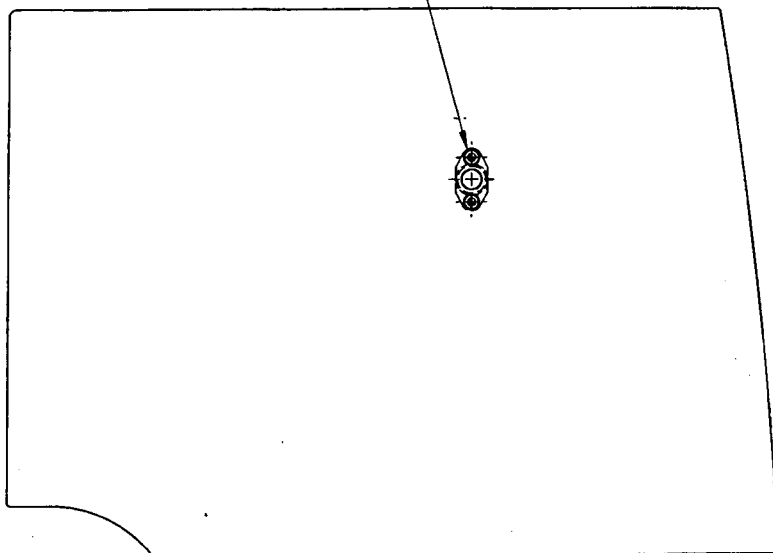
DESIGN <i>B</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. D3594	REV. A SHEET 2 OF 3
DATE 07.04.13		TITLE FLOOR DOUBLER ASSEMBLY SCALE 1:3	

RELEASED
07.07.11

Per spec #1001

MS20426AD4-4 RIVET
(2 PLACES)

M1021(x4)



D3594-3 FLOOR DOUBLER (D3594-043)
D3594-4 FLOOR DOUBLER (D3594-044)

MS21069-5
ANCHOR NUT

M104214

8/16-24

Ball St.

D3594-043 FLOOR DOUBLER ASSEMBLY
(D3594-044 OPPOSITE)

QTY -043	QTY -044	P/N	DESCRIPTION
X		D3594-043	FLOOR DOUBLER ASS'Y, LH
	X	D3594-044	FLOOR DOUBLER ASS'Y, RH
1		D3594-3	FLOOR DOUBLER, LH
	1	D3594-4	FLOOR DOUBLER, RH
1	1	MS21069-5	ANCHOR NUT
2	2	MS20426AD4-4	RIVET

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK, PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF. DART SPEC. M6061T6S.080)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3594-043/-044" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX

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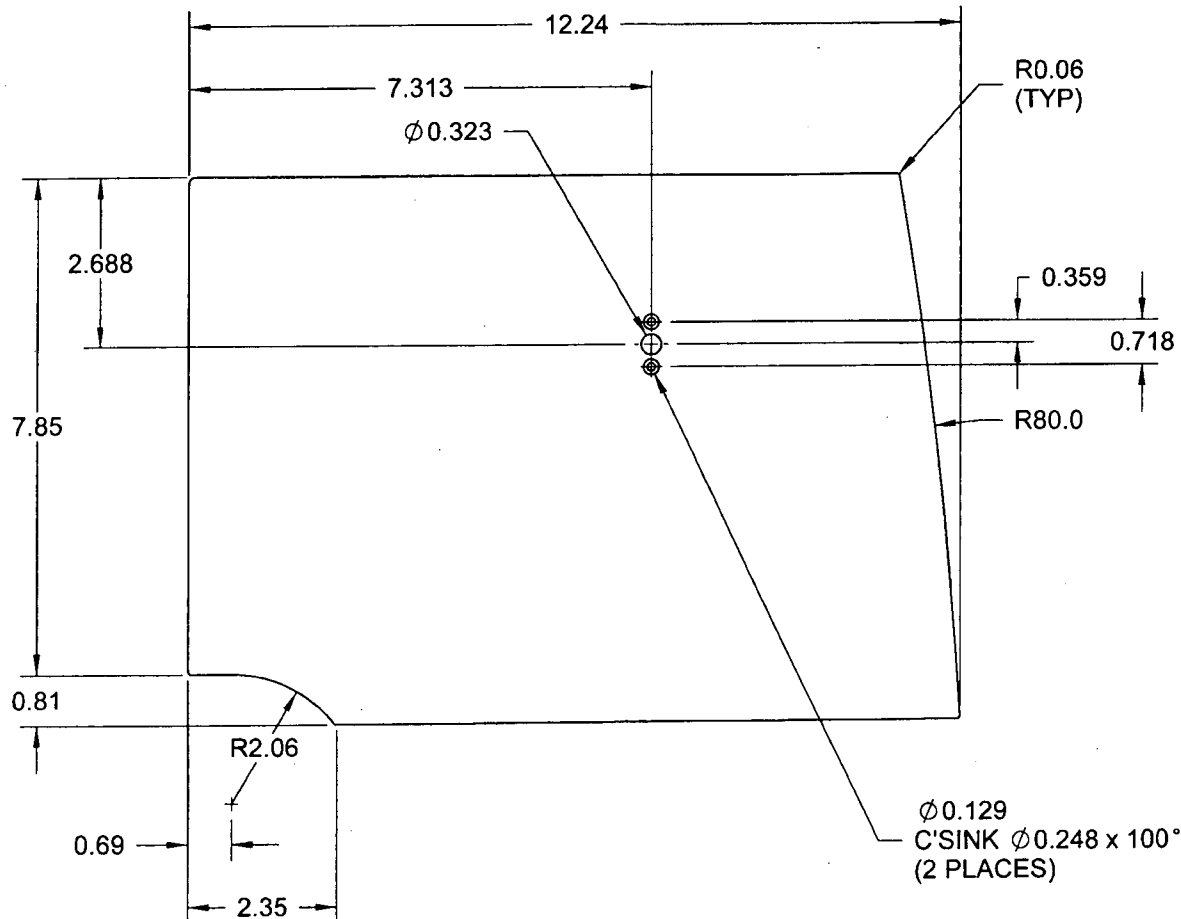
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CHECKED 13	APPROVED 13	DRAWING NO. D3594	REV. A SHEET 3 OF 3
DATE 07.04.13		TITLE DOUBLER	SCALE 1:3

RELEASED
07.07.11 13
PER 6041001



D3594-3 FLOOR DOUBLER
(D3594-4 OPPOSITE)

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Jason Murdoch

From: David Shepherd [dshepherd@dartaero.com]
Sent: Wednesday, July 18, 2007 3:45 PM
To: 'Jason Murdoch'
Cc: 'L Lacelle'
Subject: RE: NCR's

As these parts are for the D412-698-023 Door Opener Kit and the rivet holes are used to install a nutplate, the rework you have outlined below is acceptable to me.

David

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: Wednesday, July 18, 2007 11:35 AM
To: 'David Shepherd'
Subject: NCR's

Good afternoon. I had 4x D3594-043 doublers B33523, and 4x D3594-044 doublers B33524, that needed to be re-worked. For the -044, 2 parts were incorrectly counter sunk, resulting in the hole being slightly over sized. For the -043, 1 part was counter sunk too deep, which would have resulted in a bad assembly, meaning in correct riveting (a tiny gap between the material, and the rivet head). I had the parts re-worked by filling the holes necessary with weld, seeing as how the material was 6061-T6, and ground flush to the surface, then transfer drilled too the drawing. The hole sizes were only 0.129". Is this acceptable to you?

jmurdoch@dartaero.com
Q.C. COORDINATOR

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Version: 7.5.476 / Virus Database: 269.10.8/906 - Release Date: 7/17/2007 6:30 PM

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